## **DMR 2025**

# The 6th International Workshop on Designing Meaning Representations

**Proceedings of the Workshop** 

August 4, 2025 Prague, Czechia

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### **Preface**

While deep learning methods have led to many breakthroughs in practical natural language applications, there is still a sense among many NLP researchers that we have a long way to go before we can develop systems that can actually "understand" human language and explain the decisions they make. Indeed, "understanding" natural language entails many different human-like capabilities, and they include but are not limited to the ability to track entities in a text, understand the relations between these entities, track events and their participants described in a text, understand how events unfold in time, and distinguish events that have actually happened from events that are planned or intended, are uncertain, or did not happen at all. We believe a critical step in achieving natural language understanding is to design meaning representations for text that have the necessary meaning "ingredients" that help us achieve these capabilities. Such meaning representations can also potentially be used to evaluate the compositional generalization capacity of deep learning models.

This workshop intends to bring together researchers who are producers and consumers of meaning representations and, through their interaction, gain a deeper understanding of the key elements of meaning representations that are the most valuable to the NLP community. The workshop will provide an opportunity for meaning representation researchers to present new frameworks and to critically examine existing frameworks with the goal of using their findings to inform the design of next-generation meaning representations. One particular goal is to understand the relationship between distributed meaning representations trained on large data sets using network models and the symbolic meaning representations that are carefully designed and annotated by NLP researchers, with an aim of gaining a deeper understanding of areas where each type of meaning representation is the most effective.

These proceedings include papers presented at the 6th International Workshop on Designing Meaning Representations on August 4, 2025 in Prague, Czechia. DMR 2025 received 9 submissions, out of which 6 papers have been accepted to be presented at the workshop as talks. The papers address topics ranging from meaning representation methodologies to issues in meaning representation parsing, to the adaptation of meaning representations to specific applications and domains, to cross-linguistic issues in meaning representation. In addition to oral paper presentations, DMR 2025 also featured invited talks by Roberto Navigli (Sapienza University of Rome) and Mehrnoosh Sadrzadeh (University College London), entitled "NounAtlas, VerbAtlas, BMR, MOSAICo and other marvels: Towards a Unified Multilingual Semantic Framework" and "Quantum machine learning for natural language processing," respectively.

We thank our organizing committee for its continuing organization of the DMR workshops. We are grateful to all of the authors for submitting their papers to the workshop and our program committee members for their dedication and their thoughtful reviews. Finally, we thank our invited speakers for making the workshop a uniquely valuable discussion of linguistic annotation research.

Kenneth Lai and Shira Wein

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### **Invited Speakers**

Roberto Navigli, Sapienza University of Rome Mehrnoosh Sadrzadeh, University College London

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### **Workshop Program**

# Monday, August 4, 2025 8:50–9:20 Check-in and Coffee Hour 9:20–9:40 Opening Remarks 9:40–10:40 Invited Talk by Roberto Navigli: NounAtlas, VerbAtlas, BMR, MOSAICo and other marvels: Towards a Unified Multilingual Semantic Framework 10:40–11:10 Coffee Break

11:10–11:30 Comparing Manual and Automatic UMRs for Czech and Latin

Jan Štěpánek, Daniel Zeman, Markéta Lopatková, Federica Gamba and Hana Hledíková

11:30–11:50 The Role of PropBank Sense IDs in AMR-to-text Generation and Text-to-AMR Parsing

Thu Hoang, Mina Yang and Shira Wein

11:50–12:10 Boosting a Semantic Parser Using Treebank Trees Automatically Annotated with Unscoped Logical Forms

Miles Frank and Lenhart Schubert

12:10–12:30 *Using MRS for Semantic Representation in Task-Oriented Dialogue* Denson George, Baber Khalid and Matthew Stone

12:30-13:30 Lunch

- 13:30–14:30 Discussion: The Role of Semantic Representations in the Age of Large Language Models
- 14:30-15:00 *Coffee Break*
- 15:00–15:20 Evaluation Framework for Layered Meaning Representation Rémi de Vergnette, Maxime Amblard and Bruno Guillaume

### Monday, August 4, 2025 (continued)

15:20–15:40 Representing ISO-Annotated Dynamic Information in UMR
Kiyong Lee, Harry Bunt, James Pustejovsky, Alex C. Fang and Chongwon Park

15:40–16:40 Invited Talk by Mehrnoosh Sadrzadeh: Quantum machine learning for natural language processing

16:40–17:00 Closing Remarks

18:30-21:00 Dinner